



US005818055A

United States Patent [19]

Franzen

[11] Patent Number: 5,818,055

[45] Date of Patent: Oct. 6, 1998

[54] METHOD AND DEVICE FOR INJECTION OF IONS INTO AN ION TRAP

[56]

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[57]

ABSTRACT

[21] Appl. No.: 891,116

[22] Filed: Jul. 10, 1997

[30] Foreign Application Priority Data

Jul. 12, 1996 [DE] Germany 196 28 179.2

[51] Int. Cl.⁶ H01J 49/42

[52] U.S. Cl. 250/292

[58] Field of Search 250/292, 290,
250/291, 293, 281, 282, 396 R

An ion trap consists of separating the ions into ion packages within an electrical travelling wave field operated at the frequency of the drive voltage for the ion trap, or at an integral fraction of the same, transporting the ion packages by the travelling wave field to the ion trap, and injecting the ion packages into the ion trap with a favorably selected velocity and at the correct point in time. A slowing-down path at the end of the travelling field allows ions of a greater mass to be injected somewhat earlier than light ions, whereby the simultaneous capture of ions of different masses becomes more favorable.

11 Claims, 4 Drawing Sheets

